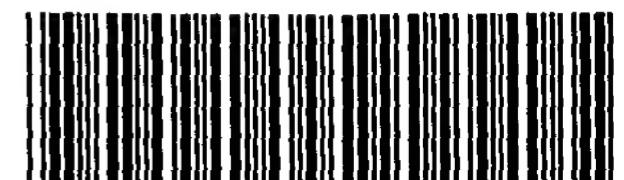


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1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/620,586B

DATE: 12/19/2002

TIME: 09:04:27

Input Set : A:\2002-12-03 3631-0117P seq list.txt

Output Set: N:\CRF4\12192002\I620586B.raw

3 <110> APPLICANT: M&E Biotech A/S
 5 <120> TITLE OF INVENTION: Method for down-regulating GDF-8 activity
 7 <130> FILE REFERENCE: 3631-0117P
 9 <140> CURRENT APPLICATION NUMBER: 09/620,586B
 10 <141> CURRENT FILING DATE: 2000-07-20
 12 <160> NUMBER OF SEQ ID NOS: 24
 14 <170> SOFTWARE: PatentIn Ver. 2.1
 17 <210> SEQ ID NO: 1
 18 <211> LENGTH: 375
 19 <212> TYPE: PRT
 20 <213> ORGANISM: Homo sapiens
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 26 20 25 30
 27 Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
 28 35 40 45
 29 Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
 30 50 55 60
 31 Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Val Ile Arg Gln Leu
 32 65 70 75 80
 33 Leu Pro Lys Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp Val
 34 85 90 95
 35 Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
 36 100 105 110
 37 Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu
 38 115 120 125
 39 Met Gln Val Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser
 40 130 135 140
 41 Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu
 42 145 150 155 160
 43 Arg Pro Val Glu Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
 44 165 170 175
 45 Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
 46 180 185 190
 47 Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val
 48 195 200 205
 49 Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
 50 210 215 220
 51 Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val Thr
 52 225 230 235 240
 53 Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Lys

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RAW SEQUENCE LISTING DATE: 12/19/2002
 PATENT APPLICATION: US/09/620,586B TIME: 09:04:27

Input Set : A:\2002-12-03 3631-0117P seq list.txt
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55 Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp Cys
56          260          265          270
57 Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
58          275          280          285
59 Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
60          290          295          300
61 Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
62 305          310          315          320
63 Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
64          325          330          335
65 Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
66          340          345          350
67 Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
68          355          360          365
69 Val Asp Arg Cys Gly Cys Ser
70          370          375
73 <210> SEQ ID NO: 2
74 <211> LENGTH: 362
75 <212> TYPE: PRT
76 <213> ORGANISM: Meleagris gallopavo
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81 Thr Glu Asn Ala Glu Lys Asp Gly Leu Cys Asn Ala Cys Thr Trp Arg
82          20          25          30
83 Gln Asn Thr Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu
84          35          40          45
85 Ser Lys Leu Arg Leu Glu Gln Ala Pro Asn Ile Ser Arg Asp Val Ile
86          50          55          60
87 Lys Gln Leu Leu Pro Lys Ala Pro Pro Leu Gln Glu Leu Ile Asp Gln
88          65          70          75          80
89 Tyr Asp Val Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp
90          85          90          95
91 Asp Tyr His Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser
92          100         105         110
93 Asp Phe Leu Val Gln Met Glu Gly Lys Pro Lys Cys Cys Phe Phe Lys
94          115         120         125
95 Phe Ser Ser Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp
96          130         135         140
97 Ile Tyr Leu Arg Gln Val Gln Lys Pro Thr Thr Val Phe Val Gln Ile
98 145          150         155         160
99 Leu Arg Leu Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile
100          165         170         175
101 Arg Ser Leu Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser
102          180         185         190
103 Ile Asp Val Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser
104          195         200         205
105 Asn Leu Gly Ile Glu Ile Lys Ala Phe Asp Glu Asn Gly Arg Asp Leu

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PATENT APPLICATION: US/09/620,586B

DATE: 12/19/2002

TIME: 09:04:27

Input Set : A:\2002-12-03 3631-0117P seq list.txt
 Output Set: N:\CRF4\12192002\I620586B.raw

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106      210          215          220
107 Ala Val Thr Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu
108 225          230          235          240
109 Glu Val Arg Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly
110          245          250          255
111 Leu Asp Cys Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro
112          260          265          270
113 Leu Thr Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro
114          275          280          285
115 Lys Arg Tyr Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe
116          290          295          300
117 Leu Gln Lys Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg
118 305          310          315          320
119 Gly Ser Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn
120          325          330          335
121 Met Leu Tyr Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro
122          340          345          350
123 Ala Met Val Val Asp Arg Cys Gly Cys Ser
124          355          360
127 <210> SEQ ID NO: 3
128 <211> LENGTH: 375
129 <212> TYPE: PRT
130 <213> ORGANISM: Gallus sp.
132 <400> SEQUENCE: 3
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135 Ala Val Asp Pro Val Ala Leu Asp Gly Ser Ser Gln Pro Thr Glu Asn
136          20          25          30
137 Ala Glu Lys Asp Gly Leu Cys Asn Ala Cys Thr Trp Arg Gln Asn Thr
138          35          40          45
139 Lys Ser Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
140          50          55          60
141 Arg Leu Glu Gln Ala Pro Asn Ile Ser Arg Asp Val Ile Lys Gln Leu
142          65          70          75          80
143 Leu Pro Lys Ala Pro Pro Leu Gln Glu Leu Ile Asp Gln Tyr Asp Val
144          85          90          95
145 Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
146          100         105         110
147 Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe Leu
148          115         120         125
149 Val Gln Met Glu Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser
150          130         135         140
151 Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr Leu
152 145          150          155          160
153 Arg Gln Val Gln Lys Pro Thr Thr Val Phe Val Gln Ile Leu Arg Leu
154          165          170          175
155 Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser Leu
156          180          185          190
157 Lys Leu Asp Met Asn Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp Val

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RAW SEQUENCE LISTING

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TIME: 09:04:27

Input Set : A:\2002-12-03 3631-0117P seq list.txt
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158      195          200          205
159 Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu Gly
160      210          215          220
161 Ile Glu Ile Lys Ala Phe Asp Glu Thr Gly Arg Asp Leu Ala Val Thr
162      225          230          235          240
163 Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val Arg
164      245          250          255
165 Val Thr Asp Thr Pro Lys Arg Ser Arg Asp Phe Gly Leu Asp Cys
166      260          265          270
167 Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr Val
168      275          280          285
169 Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg Tyr
170      290          295          300
171 Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln Lys
172      305          310          315          320
173 Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser Ala
174      325          330          335
175 Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu Tyr
176      340          345          350
177 Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met Val
178      355          360          365
179 Val Asp Arg Cys Gly Cys Ser
180      370          375
183 <210> SEQ ID NO: 4
184 <211> LENGTH: 376
185 <212> TYPE: PRT
186 <213> ORGANISM: Mus musculus
188 <400> SEQUENCE: 4
189 Met Met Gln Lys Leu Gln Met Tyr Val Tyr Ile Tyr Leu Phe Met Leu
190      1           5           10          15
191 Ile Ala Ala Gly Pro Val Asp Leu Asn Glu Gly Ser Glu Arg Glu Glu
192      20          25          30
193 Asn Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Ala Trp Arg Gln Asn
194      35          40          45
195 Thr Arg Tyr Ser Arg Ile Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys
196      50          55          60
197 Leu Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Ala Ile Arg Gln
198      65          70          75          80
199 Leu Leu Pro Arg Ala Pro Pro Leu Arg Glu Leu Ile Asp Gln Tyr Asp
200      85          90          95
201 Val Gln Arg Asp Asp Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr
202      100         105         110
203 His Ala Thr Thr Glu Thr Ile Ile Thr Met Pro Thr Glu Ser Asp Phe
204      115         120         125
205 Leu Met Gln Ala Asp Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser
206      130         135         140
207 Ser Lys Ile Gln Tyr Asn Lys Val Val Lys Ala Gln Leu Trp Ile Tyr
208      145         150         155         160
209 Leu Arg Pro Val Lys Thr Pro Thr Thr Val Phe Val Gln Ile Leu Arg

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/620,586B

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Input Set : A:\2002-12-03 3631-0117P seq list.txt
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```

210           165           170           175
211 Leu Ile Lys Pro Met Lys Asp Gly Thr Arg Tyr Thr Gly Ile Arg Ser
212           180           185           190
213 Leu Lys Leu Asp Met Ser Pro Gly Thr Gly Ile Trp Gln Ser Ile Asp
214           195           200           205
215 Val Lys Thr Val Leu Gln Asn Trp Leu Lys Gln Pro Glu Ser Asn Leu
216           210           215           220
217 Gly Ile Glu Ile Lys Ala Leu Asp Glu Asn Gly His Asp Leu Ala Val
218           225           230           235           240
219 Thr Phe Pro Gly Pro Gly Glu Asp Gly Leu Asn Pro Phe Leu Glu Val
220           245           250           255
221 Lys Val Thr Asp Thr Pro Lys Arg Ser Arg Arg Asp Phe Gly Leu Asp
222           260           265           270
223 Cys Asp Glu His Ser Thr Glu Ser Arg Cys Cys Arg Tyr Pro Leu Thr
224           275           280           285
225 Val Asp Phe Glu Ala Phe Gly Trp Asp Trp Ile Ile Ala Pro Lys Arg
226           290           295           300
227 Tyr Lys Ala Asn Tyr Cys Ser Gly Glu Cys Glu Phe Val Phe Leu Gln
228           305           310           315           320
229 Lys Tyr Pro His Thr His Leu Val His Gln Ala Asn Pro Arg Gly Ser
230           325           330           335
231 Ala Gly Pro Cys Cys Thr Pro Thr Lys Met Ser Pro Ile Asn Met Leu
232           340           345           350
233 Tyr Phe Asn Gly Lys Glu Gln Ile Ile Tyr Gly Lys Ile Pro Ala Met
234           355           360           365
235 Val Val Asp Arg Cys Gly Cys Ser
236           370           375
239 <210> SEQ ID NO: 5
240 <211> LENGTH: 375
241 <212> TYPE: PRT
242 <213> ORGANISM: Bos taurus
244 <400> SEQUENCE: 5
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247 Val Ala Gly Pro Val Asp Leu Asn Glu Asn Ser Glu Gln Lys Glu Asn
248   20          25          30
249 Val Glu Lys Glu Gly Leu Cys Asn Ala Cys Leu Trp Arg Glu Asn Thr
250   35          40          45
251 Thr Ser Ser Arg Leu Glu Ala Ile Lys Ile Gln Ile Leu Ser Lys Leu
252   50          55          60
253 Arg Leu Glu Thr Ala Pro Asn Ile Ser Lys Asp Ala Ile Arg Gln Leu
254   65          70          75          80
255 Leu Pro Lys Ala Pro Pro Leu Leu Glu Leu Ile Asp Gln Phe Asp Val
256   85          90          95
257 Gln Arg Asp Ala Ser Ser Asp Gly Ser Leu Glu Asp Asp Asp Tyr His
258   100         105         110
259 Ala Arg Thr Glu Thr Val Ile Thr Met Pro Thr Glu Ser Asp Leu Leu
260   115         120         125
261 Thr Gln Val Glu Gly Lys Pro Lys Cys Cys Phe Phe Lys Phe Ser Ser

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/620,586B

DATE: 12/19/2002

TIME: 09:04:28

Input Set : A:\2002-12-03 3631-0117P seq list.txt

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